



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,961

01/31/2005

Hiroyuki Hanao

05011/LH

6917

1933 7590 06/12/2009

FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

REICHLE, KARIN M

ART UNIT

PAPER NUMBER

3761

MAIL DATE

DELIVERY MODE

06/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,961	Applicant(s) HANA O ET AL.	
	Examiner Karin M. Reichle	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2009 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4-6-09 has been entered.

Specification

Drawings

2. The drawings were received on 4-6-09. These drawings are approved. However, see following discussion.

3. The drawings are objected to because the empty boxes labeled A1-C3 should be avoided i.e. the steps should be textually described and referenced by designation to the Figures 7A-C. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

Art Unit: 3761

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the invention as now claimed in claims 4 and 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

Art Unit: 3761

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Description

5. The disclosure is objected to because of the following informalities: 1) The Summary of the Invention section, i.e. a description of the claimed invention, and the invention of the claims should be commensurate, see MPEP 608.01(d). 2) In the amendments to page 15, reference to numerals A1-C3, i.e. text between and together with parentheses, should be avoided. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. Claims 1, 4-5, and 8-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 now requires the absorbent article have a total thickness less than 5mm, i.e. 0 to less than 5mm, in combination with the other claimed features. While the originally filed specification at page 17, first full paragraph and the paragraph bridging pages 13-14 supports such a thickness in combination with certain thicknesses of the absorbent body/layers thereof, this is not what is claimed. If Applicant maintains such claim language/combination, the specific portion of the original specification which sets forth support

Art Unit: 3761

commensurate in scope with the combination of each claim in a single embodiment should be set forth.

7. Claims 1, 4-5 and 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 1, lines 20-21 are unclear since they claim a thickness of the absorbent article but then such thickness also being 0mm, i.e. "5 mm or less", i.e. no thickness. In regard to claim 4, a positive structural antecedent basis for "both surfaces" should be set forth.

Claim Language Interpretation

8. It is noted that claim 4 is a product by process claim, see MPEP 2113, i.e. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). Therefore, and also due to lack of clarity set forth in paragraph 7, the end product of claim 4, last two lines is considered to be a topsheet as claimed on lines 1-2 also including at least portions of two surfaces which are hydrophilic. Claims 5 and 1, as interpreted, recite the absorption rate and the absorption capacity and recites the moisture blocking value of the super absorbent polymer, respectively, as determined by the procedures set forth on 14-17 of the instant application, and thus prior to incorporation in the article. It is noted that the claimed

Art Unit: 3761

invention is the article not the superabsorbent polymer by itself. It is also noted that the chemical composition of the superabsorbent polymer in the article has not been claimed. Due to the lack of clarity discussed in paragraph 7, as well as the discussion in paragraph 6, note 2163.06, I., claim 1 is interpreted to require some thickness of the article be 5mm or less, i.e. claim 1 is not interpreted to require the maximum thickness of the article be 5mm or less.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1, 5, 8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Procter and Gamble Co., PCT '877.

Claims 1 and 5: See Claim Language Interpretation section *supra*, hereinafter also referred to as CLI, and '877, esp. at the abstract, page 1, first full paragraph, page 3, second to last full paragraph, the paragraph bridging pages 3-4, page 4, first full paragraph, Figure 1, page 5, line 14-page 6, line 4, page 6, line 16-page 18, line 16 and page 23, lines 1-2 and thereby, also PCT '368 (and thereby page 44, first full paragraph (and thereby '823 at the Figures, esp. 7 and 10 and col. 6, line 54-col. 7, line 11) and page 50, first full paragraph (and thereby '003 at col. 6, lines 5-7 and 43-53 and col. 7, lines 1-2), '597 (note col. 22, lines 45-52), '592, EPO '393, '803 (Note col. 3, lines 32-41), '278 (Note col. 3, lines 41-48) and PCT '669 (Note page 26, lines 10-14), i.e. '877 teaches an absorbent article comprising an absorbent body, i.e. the at least one absorbent structure of 28, e.g., page 17, last paragraph of '877, and a top sheet, e.g. the core wrap web of 28, e.g., page 17, last paragraph again, which is liquid permeable and includes a non-

Art Unit: 3761

woven fabric covering the absorbent body. '877 further teaches a liquid permeable upper sheet, e.g. 24, a liquid impermeable lower sheet, 26 and the topsheet and absorbent body situated therebetween, see, e.g., Figure 1 of '877. '877 further teaches the superabsorbent content is not less than 55% by weight of the body at least with "specific specificity", see MPEP 2131.03, I and II, and '877 at, e.g., the paragraph bridging pages 3-4. '877 also teaches the top sheet non-woven fabric having a fiber thickness of not more than 2.0 denier (1.1 denier is equal to 1 dTex), see, e.g., the paragraph bridging pages 3-4 again, with "sufficient specificity" and a basis weight of not less than 10g/m², see, e.g., page 9, second to last full paragraph and thereby, '393 at, e.g., Table 1, and page 11, second thru fourth full paragraphs, with "specific specificity". The claim also requires 1) a wet strength of the non-woven fabric be not less than not less than 300g/25mm, i.e. 300g/ 2.5cm or 300g/in (It is noted that the claim does not specify in which direction such strength is measured, i.e. machine or cross). While '877 does not explicitly teach such range of wet strengths as claimed, i.e. a range of wet strength with the dimension of g/2.5 cm, it does teach the topsheet non-woven fabric having the same fiber thickness, basis weight and being a spunbonded and/or meltblown nonwoven as claimed and/or disclosed, see the paragraph bridging pages 10-11 of the instant application, as well as some wet strength, i.e. all materials have a wet strength. Therefore, it is the Examiner's first position that there is sufficient factual evidence for one to conclude that such topsheet of '877 inherently includes a wet strength as claimed when tested in a manner similar to the claimed topsheet. See MPEP 2112.01. See also the discussion of these claims with respect to '877, *infra*, in paragraph 11. Claim 1 also now requires 2) the absorbent body having a front surface side and comprising a first layer of pulp fibers, a second layer of pulp fibers and super absorbent polymer and a third layer of pulp fibers such that the

Art Unit: 3761

super absorbent polymer is only in the second layer, wherein the first, second and third layers are laminated (defined by the dictionary as “to separate into laminae; to make by uniting superposed layers of one or more materials”) in order from the front surface side such that the second layer is between the first and third layers, and wherein the second layer of the absorbent body is thicker than both the first layer of the absorbent body and the third layer of the absorbent body, 3) a total thickness of the absorbent article which is 5 mm or less, as best understood, see CLI, and 4) a moisture absorbing blocking rate of the super absorbent polymer which is 50% or less. Claim 5 further requires the absorption capability conditions of an absorption speed of 30cc of artificial urine of 50 seconds or less and an absorbed amount of artificial urine under a pressure of 20g/cm² of 28cc/g or more. With regard to 2), see cited portions of '877, e.g. the paragraph bridging pages 6-7 of '877, i.e. layer(s)/structure(s) of the pulp fiber and mixed layer(s)/structure(s) of the pulp fiber and the superabsorbent polymer, page 13, last full paragraph, first sentence thereof, of '877, i.e. comprising a pulp fiber and a super absorbent polymer, page 8, first full paragraph, last sentence thereof, of '877, and thereby, '368 at page 44, first full paragraph, and thereby, '823 at the Figures, esp. 7 and 10 and col. 6, line 54-col. 7, line 11, i.e. the prior art teaches the absorbent body having a front surface side and comprising a first “layer” of pulp fibers, a second “layer” of pulp fibers and super absorbent polymer and a third “layer” of pulp fibers such that the super absorbent polymer is only in the second layer, wherein the first, second and third layers are “laminated” in order from the front surface side such that the second layer is between the first and third layers, and wherein the second layer of the absorbent body is thicker than both the first layer of the absorbent body and the third layer of the absorbent body. With regard to 3), see cited portions of '877, e.g. page 8, first full paragraph, last sentence

Art Unit: 3761

thereof, of '877 and thereby, also PCT '368 at page 50, first full paragraph, and thereby, '003 at col. 6, lines 5-7 and 43-53 and col. 7, lines 1-2, and '597 (note col. 22, lines 45-52), and page 17, first full and second to last full paragraphs of '877 and thereby, '803 (Note col. 3, lines 32-41), '278 (Note col. 3, lines 41-48) and PCT '669 (Note page 26, lines 10-14), i.e. the total thickness of the topsheet and back sheet in the side flaps is 0.4 mm, i.e. a total thickness of the absorbent article is 5 mm or less, as best understood, see CLI. With regard to 4) and 5), see discussion supra, and the Claim Language Interpretation section supra, i.e. the properties claimed are those of the superabsorbent alone used to make the article not those of the article. While '877 does not teach such specific properties of the superabsorbent as tested according to the instant specification, i.e. the absorption capability conditions of an absorption speed of 30cc of artificial urine of 50 seconds or less, an absorbed amount of artificial urine under a pressure of 20g/cm² of 28cc/g or more, and a moisture absorbing blocking rate of 50% or less as tested according to the instant specification, it does teach superabsorbent(s) having the same composition as disclosed on page 10, last full paragraph of the instant application, see, e.g., '877 at the portions cited supra and thereby, e.g., '597 at col. 7, lines 6-22, and such superabsorbents having certain performance characteristics including rate of absorption, absorbed amount, etc. which are dependent upon the type of superabsorbent used, see, e.g., the portions of '877 cited supra, and the ability to be uniformly dispersed, see, e.g., page 23, lines 1-2 (Note the paragraph bridging pages 16-17 of the instant application), and thereby, not only the general conditions as claimed, as best understood, and/or disclosed, i.e. the combination of a fabric with fiber thickness, basis weight and wet strength and an absorbent body with a superabsorbent/pulp ratio, but also that such capabilities are result effect variables, i.e. a variable which achieves a

Art Unit: 3761

recognized result, i.e. the desired performance characteristics, see MPEP 2144.05 again.

Furthermore, where the general conditions of a claim are disclosed in the prior art, as here, it is not inventive to discover the optimum or workable ranges by routine experimentation, if the '877 superabsorbent does not already include such capabilities when tested in a manner similar to Applicant's superabsorbent. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Claim 8: The top sheet is conterminous with the absorbent body, see, e.g., page 12, third full paragraph.

Claim 13: The absorbent article of further comprises water-repellent non-woven fabrics for forming three- dimensional gathers arranged on the liquid-permeable upper sheet at side edge portions of the absorbent body, see, e.g., Figure 1 and page 17, first full paragraph of '877 and thereby, e.g. '278 at, e.g., the Figures and col. 10, lines 47-55.

Claim 14: The liquid-permeable upper sheet and the liquid-impermeable lower sheet are both in contact with the top sheet, see discussion of claim 8 and page 12, first full paragraph and Figure 1 of '877 and PCT '669 at, e.g., Figures 1 and 3 and page 22, lines 20-22 and page 24, lines 23-26.

11. Claims 1, 5, 7-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Procter and Gamble Co., PCT '877, in view of Abuto '592.

Claims 1 and 5: See the Examiner's first position set forth in paragraph 10 supra. See cited portions of '877 as well as page 2, third full paragraph, i.e. containment is desired, and col. 2, lines 1-5, col. 5, lines 20-27 and Examples of '592 and the portions thereof cited in paragraph 10, i.e. nonwoven sheets used as a core wrap include a wet strength as claimed to provide a sheet which does not tear, i.e. contains. Therefore, i.e. the Examiner's second position, to employ a

Art Unit: 3761

wet strength as claimed with the '877 top sheet, if not already, would be obvious to one of ordinary skill in the art in view of the teachings of '592 due to the recognition that such a wet strength in such a nonwoven sheet which would provide a top sheet/core wrap sheet which does not tear and the desirability of structural integrity in the top sheet of '877 as evidenced by, e.g., the portions cited supra.

Claims 8 and 13-14: See discussion supra in paragraph 10.

Claim 7: This claim requires the top sheet be a single sheet having an overlapping portion at a center of the front surface side of the absorbent body and both surfaces of the non-woven fabric in the top sheet be subjected to a hydrophilic treatment, as best understood, see CLI supra. See '877 at the portions cited supra, e.g. pages 11-12 and page 9, esp. page 11, fourth full paragraph and page 11, second to last line-12, line 23, page 9, third full paragraph. While '877 teaches the top sheet enclosing the absorbent body and incorporates tests of '592, it does not clearly teach all the claimed structure. See however Figures 2-3 and col. 6, lines 15-40 of '592. Note also col. 5, lines 15-19 of '592, i.e. the fibers are treated to be hydrophilic and the fibers are part of all the wrap. Also note page 12, second full paragraph of '877, i.e. all surfaces in portions in fluid flow path hydrophilic and/or surfaces/regions having different hydrophilic properties. Therefore, to employ a top sheet which is a single layer having an overlapping portion at the center as taught by '592 on '877 would be obvious to one of ordinary skill in the art in view of the recognition that such would enclose the absorbent body thereof and the desire of '877 to do so. In so doing the prior art teaches a topsheet which is a single sheet and has an overlapping portion at a center of the front surface side of the absorbent body and at least portions of two

Art Unit: 3761

surfaces are hydrophilic, e.g. each of the portions which overlap are hydrophilic or any two of surfaces in portions in fluid flow path, as claimed, as best understood.

12. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Procter and Gamble Co., PCT '877, alone, or, in the alternative, in view of Abuto '592, and further in view of Pieniak et al '423 and Dobrin '750.

These claims require an outer layer non-woven fabric arranged alongside the liquid-impermeable lower sheet on an opposite side from the top sheet and absorbent body (claim 9), and the liquid-impermeable lower sheet in contact with the outer layer non-woven fabric alone (claim 12) or in combination with the liquid-permeable upper sheet partly in contact with the outer layer non-woven fabric (claims 10 and 11). While '877 at, e.g., page 18, second full paragraph, last sentence, and '669, incorporated by '877, at, e.g., page 23, first full paragraph, teach backsheets of composite materials, such structure is not explicitly taught. However, see '423 at the Figures and col. 2, lines 12-17 and 32-42 and '750 at the Figures and col. 1, lines 5-8 and 50-63. To employ an outer layer non-woven fabric arranged alongside the liquid-impermeable lower sheet on an opposite side from the top sheet and absorbent body, the liquid-impermeable lower sheet in contact with the outer layer non-woven fabric and the liquid-permeable upper sheet partly in contact with the outer layer non-woven fabric as taught by '423 and '750, i.e. a composite backsheet, on the '877 device would be obvious to one of ordinary skill in the art in view of the recognition that such would improve the comfort of the article while maintaining absorbency and the desire of such and composite material backsheets by '877.

Art Unit: 3761

Response to Arguments

13. Applicant's remarks have been carefully considered but are either considered moot in that the issue discussed has not been repeated or deemed not persuasive for the reasons set forth *supra*.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karin M. Reichle whose telephone number is (571) 272-4936. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KMR
June 10, 2009

/Karin M. Reichle/
Primary Examiner, Art Unit 3761

Application/Control Number: 10/522,961

Page 14

Art Unit: 3761